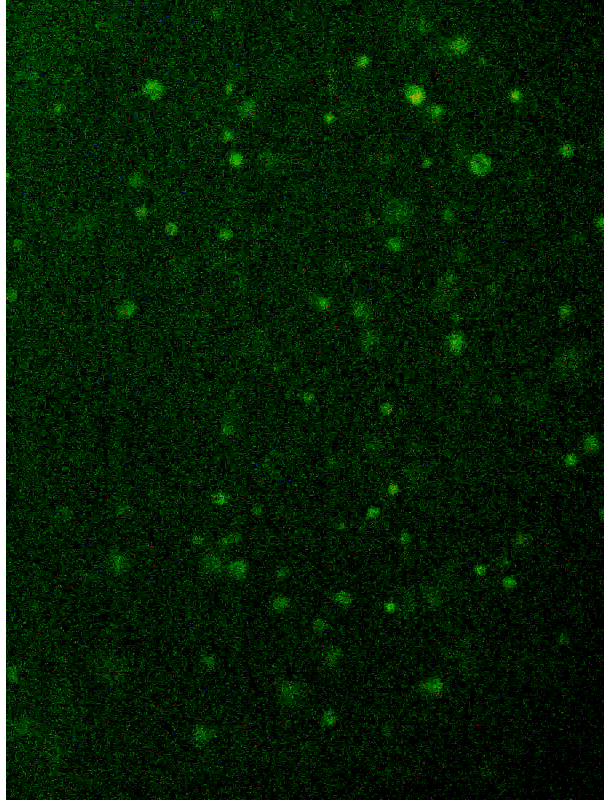
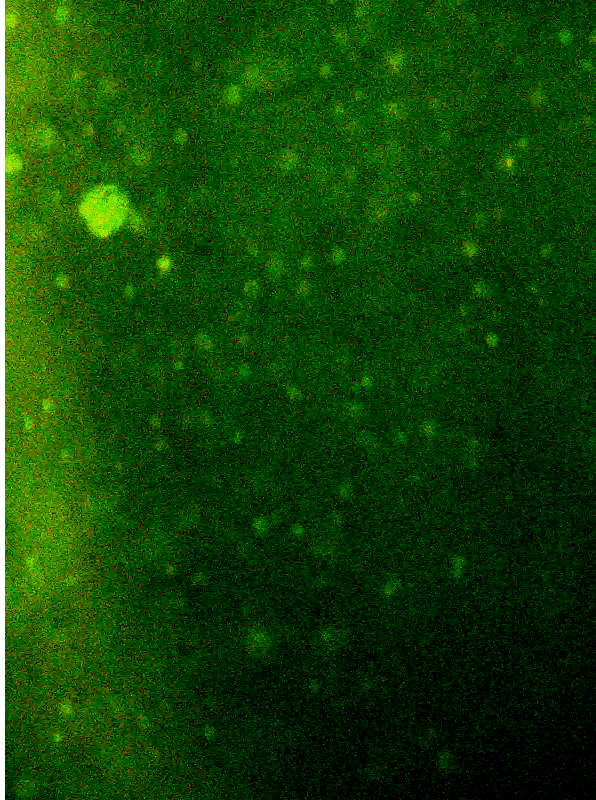
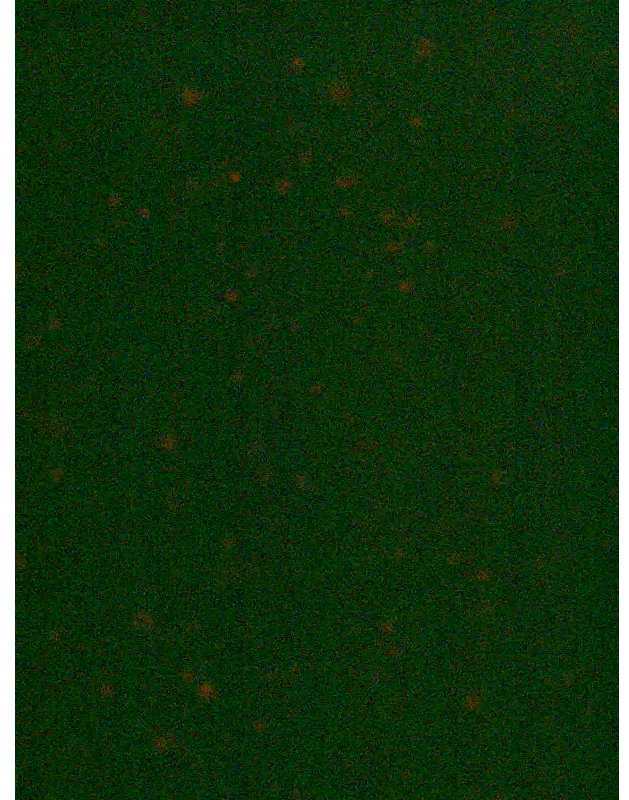
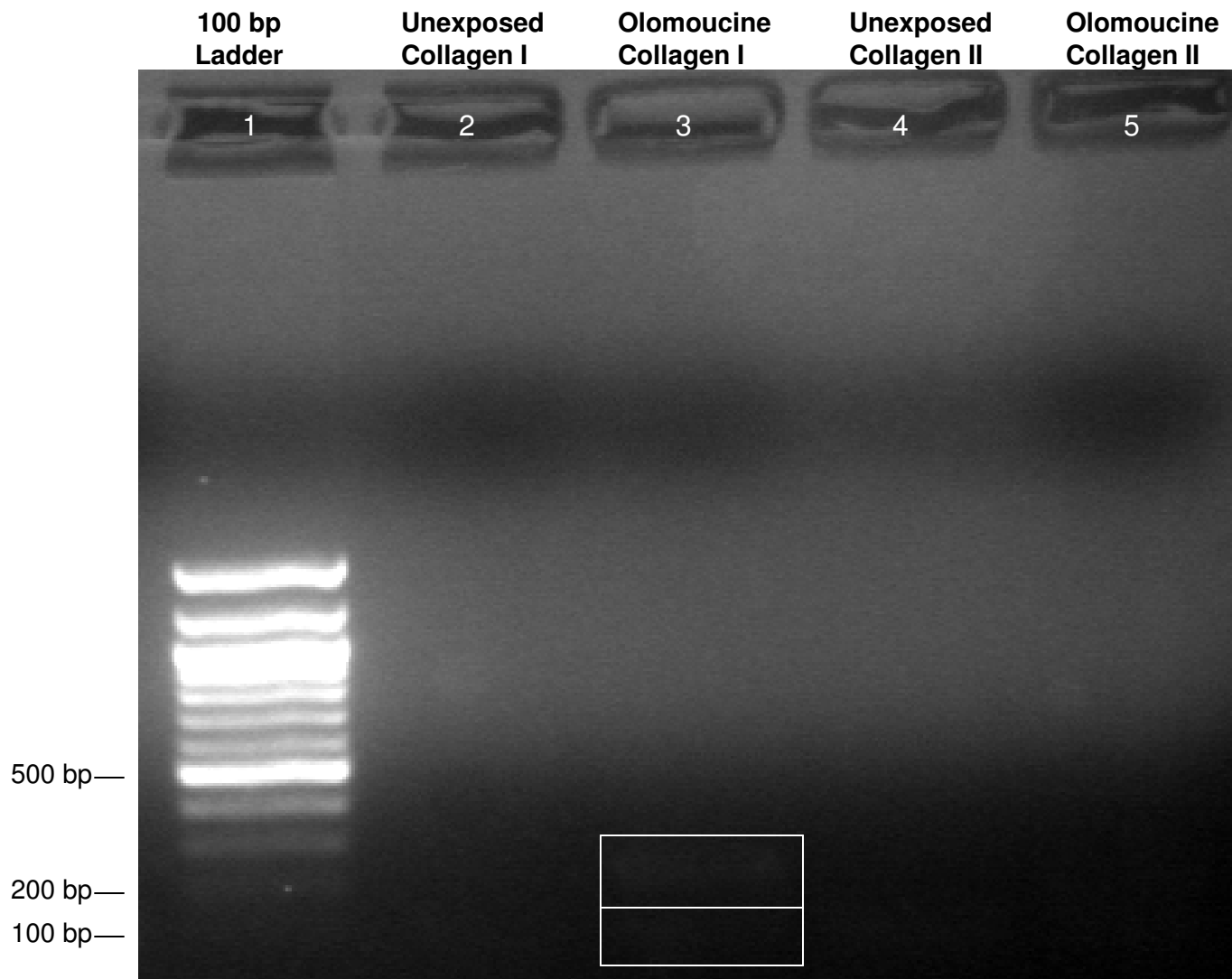
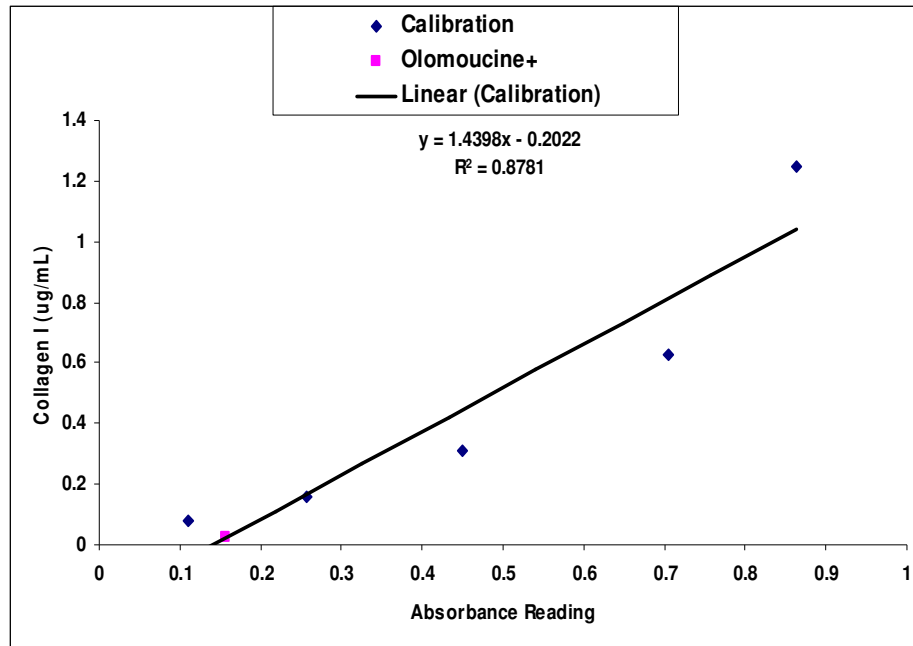
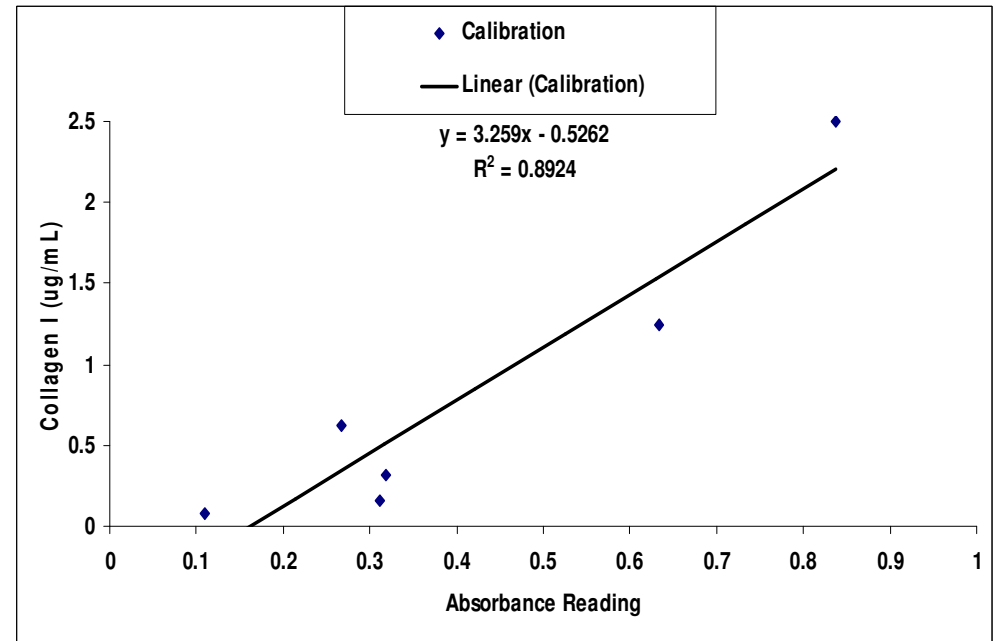


**A****B****C**

**Fig. 1. Fluorescence Microscopy of LIVE/DEAD® Cell Viability Assays.** Cells were exposed to two fluorescent dyes, SYTO 10 and ethidium homodimer-2, and then were examined at 10x magnification using fluorescence microscopy. Viable cells appear in green whereas dead cells appear in red. Viable cells were observed in both the culture exposed to olomoucine (A) and the unexposed culture (B). Dead cells were also observed in the olomoucine exposed culture (C), whereas no dead cells were observed in the olomoucine free culture.



**Fig. 2. RT-PCR Gel Analysis to Determine the Ratio of Collagen I to Collagen II Expression in Cells Exposed to Olomoucine versus Olomoucine Free Cells.** RT-PCR products of RNA extracts from cultures exposed to olomoucine and from unexposed cultures cycled with collagen I, collagen II, and GAPDH primers were run on a 1.2% agarose gel to determine the relative expression of collagen I to collagen II in these cells. Bands at 400 bp would indicate collagen II DNA, 200 bp would indicate collagen I DNA, and 100 bp would indicate GAPDH DNA. All bands aside from the 100 bp ladder in (lane 1) were extremely faint, however there were visible bands corresponding collagen I and GAPDH corresponding to the culture exposed to olomoucine (lane 3).

**A****B**

**Fig. 3. Calibration Curves from ELISA Standards Used to Calculate the Relative Protein Concentrations of Collagen I to Collagen II in MSCs Exposed to and Free of Olomoucine.** An indirect ELISA analysis was performed on protein extracts of MSCs exposed to and free of olomoucine and a calibration curve was created from collagen standards to determine the relative concentrations of collagen I (A) and collagen II (B) in the two cultures. Due to the noise in data, neither coefficient of determination was above 0.9. In addition, only protein extracts from olomoucine exposed cells in the collagen I assay exhibited absorbance levels above background. Therefore we were not able to make any quantitative statements about the relative expression of collagen I to collagen II. However, the result does indicate that cells exposed to olomoucine produce more collagen I than collagen II.